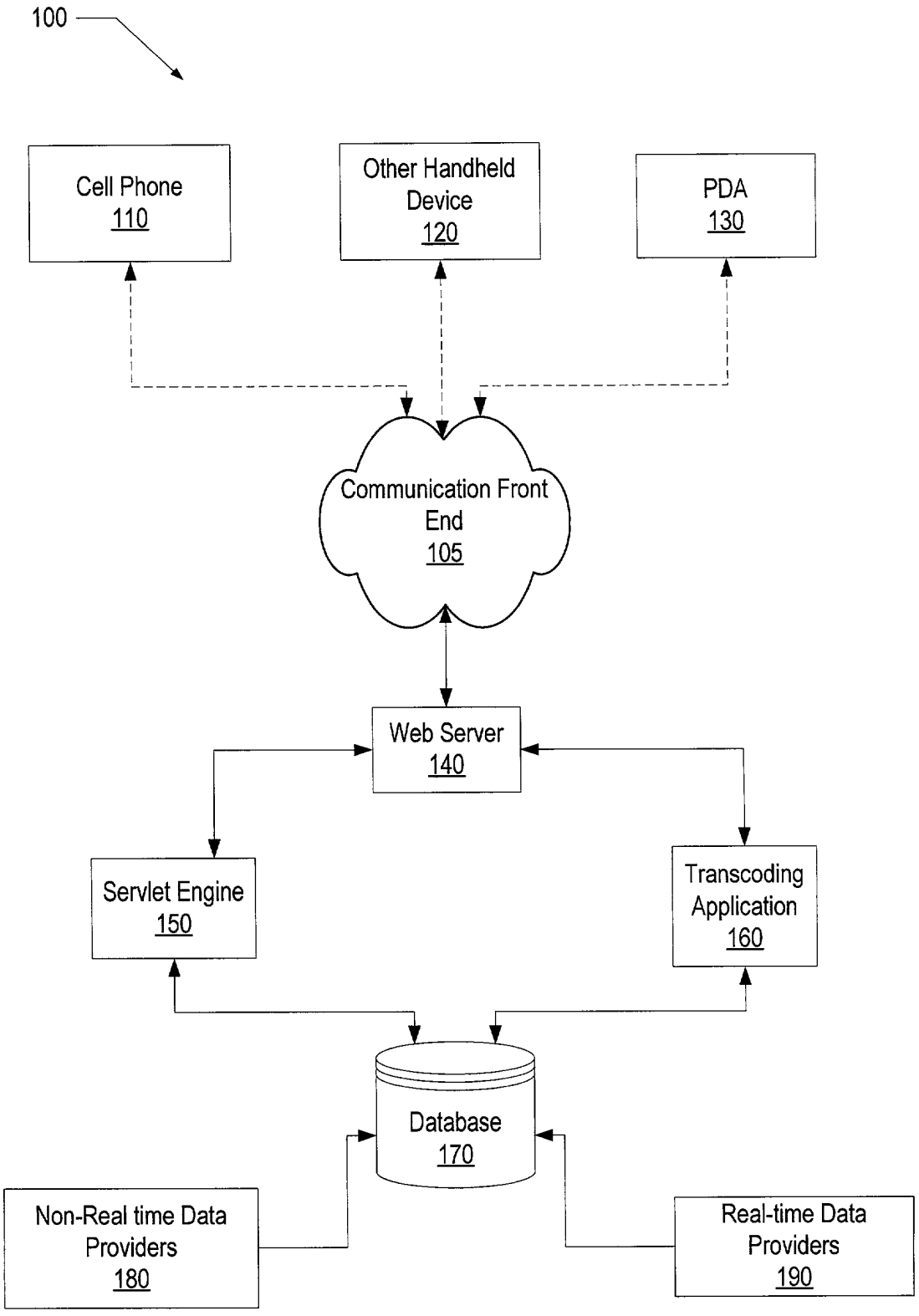

100
Cell Phone
110
Other Handheld Device
120
PDA
130
Communication Front End
105
Web Server
140
Servlet Engine
150
Transcoding Application
160
Database
170
Non-Real time Data Providers
180
Real-time Data Providers
190

Figure 1

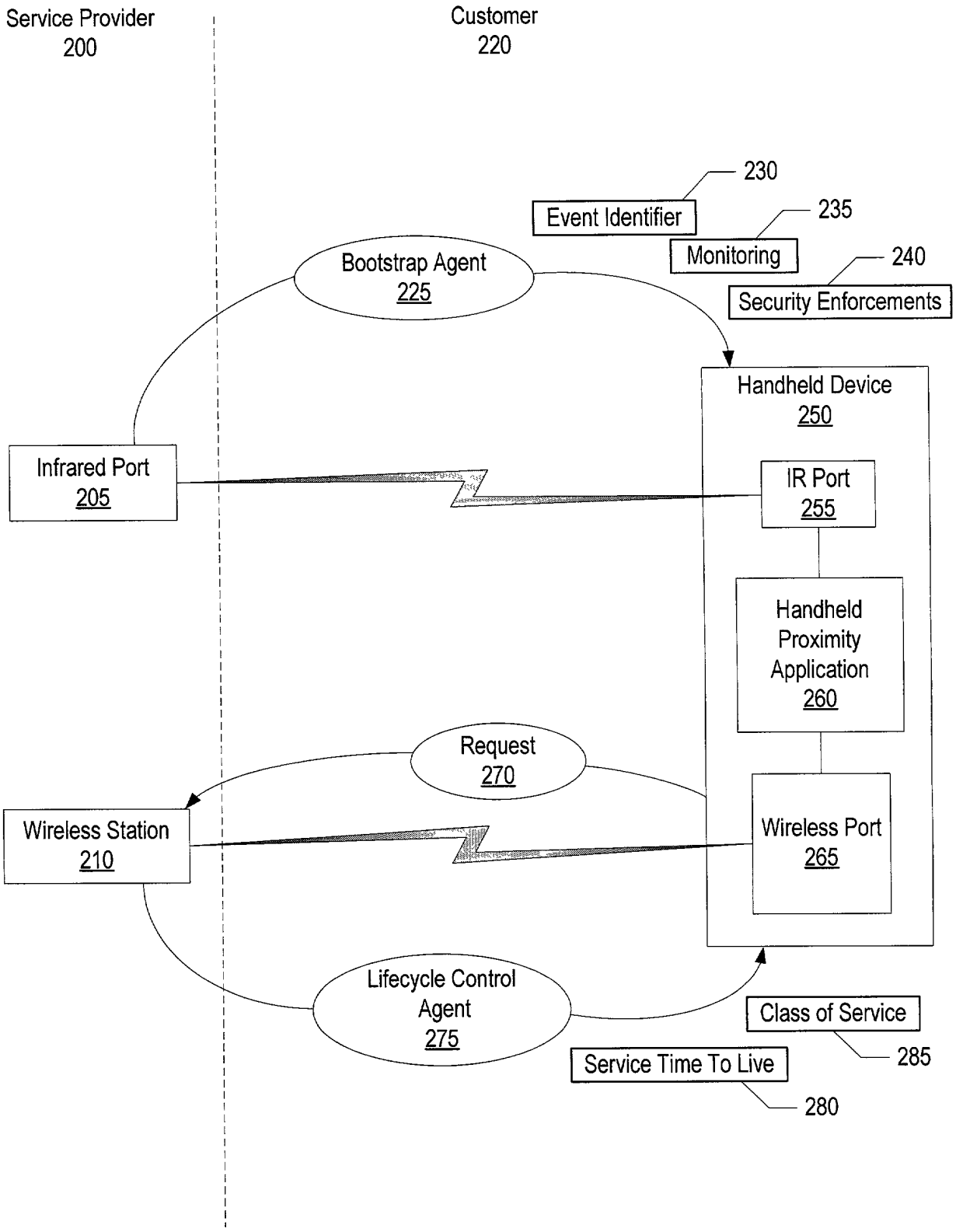

Service Provider
200
Customer
220
230
Event Identifier
235
Monitoring
240
Security Enforcements
Bootstrap Agent
225
Handheld Device
250
Infrared Port
205
IR Port
255
Handheld
Proximity
Application
260
Request
270
Wireless Station
210
Wireless Port
265
Lifecycle Control
Agent
275
Class of Service
285
Service Time To Live
280

Figure 2

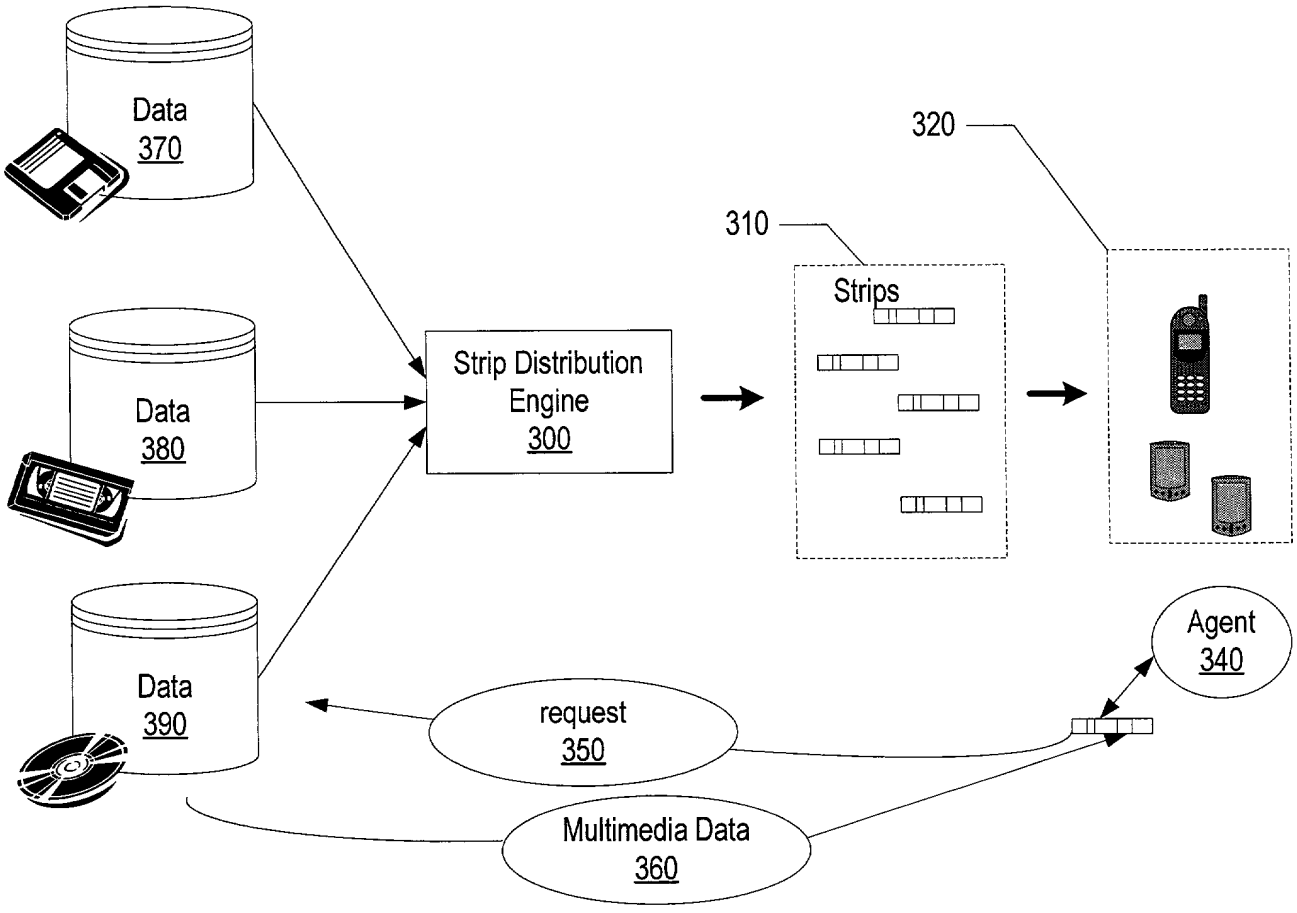

Data
370
Data
380
Data
390
Strip Distribution
Engine
300
310
Strips
320
Agent
340
request
350
Multimedia Data
360

Figure 3

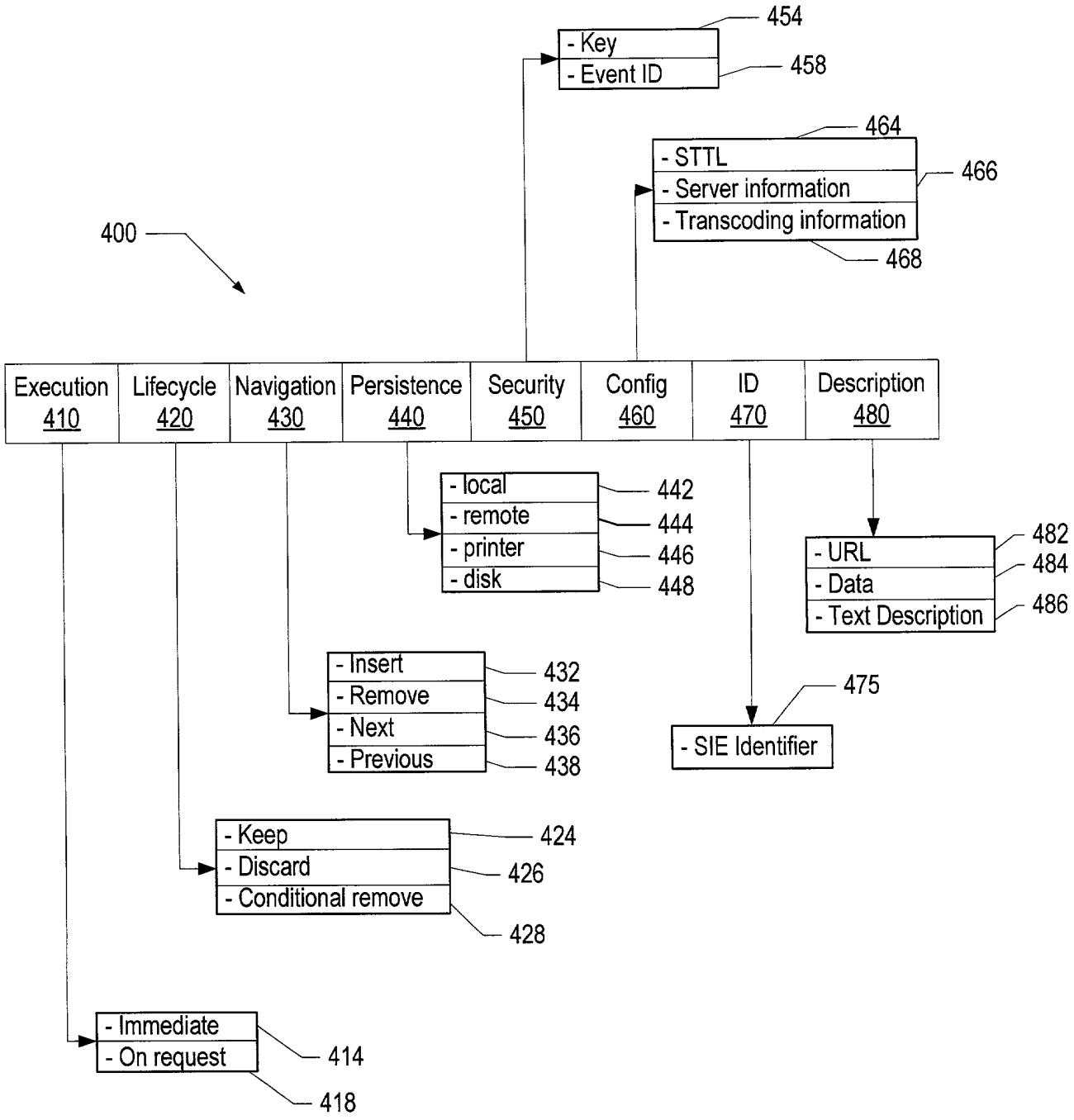

400
Execution 410
Lifecycle 420
Navigation 430
Persistence 440
Security 450
Config 460
ID 470
Description 480
- Key
- Event ID
454
458
- STTL
- Server information
- Transcoding information
464
466
468
- local
- remote
- printer
- disk
442
444
446
448
- URL
- Data
- Text Description
482
484
486
- Insert
- Remove
- Next
- Previous
432
434
436
438
- SIE Identifier
475
- Keep
- Discard
- Conditional remove
424
426
428
- Immediate
- On request
414
418

Figure 4

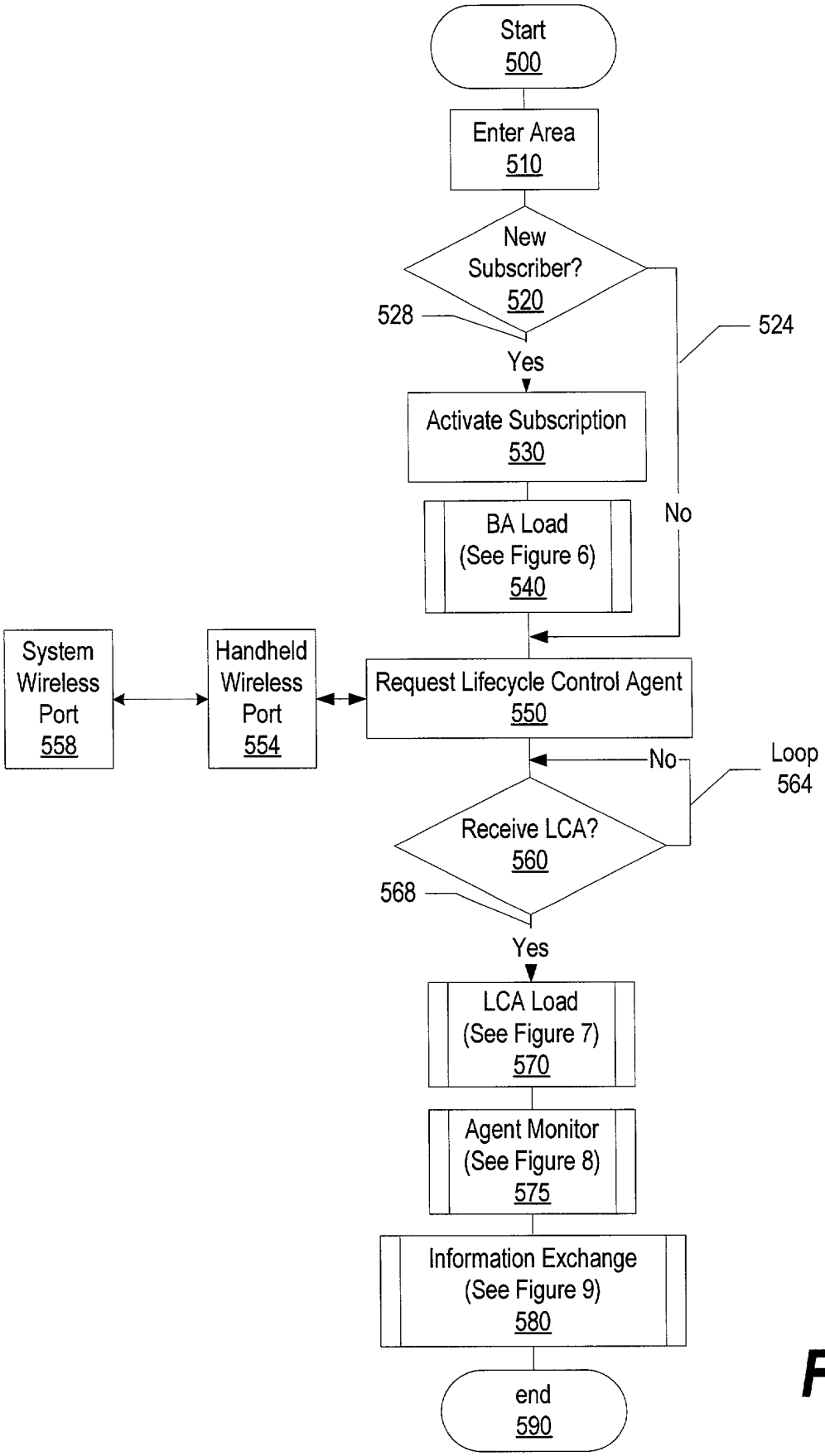

Start
500
Enter Area
510
New Subscriber?
520
528
524
Yes
No
Activate Subscription
530
BA Load
(See Figure 6)
540
System Wireless Port
558
Handheld Wireless Port
554
Request Lifecycle Control Agent
550
No
Loop
564
Receive LCA?
560
568
Yes
LCA Load
(See Figure 7)
570
Agent Monitor
(See Figure 8)
575
Information Exchange
(See Figure 9)
580
end
590

Figure 5

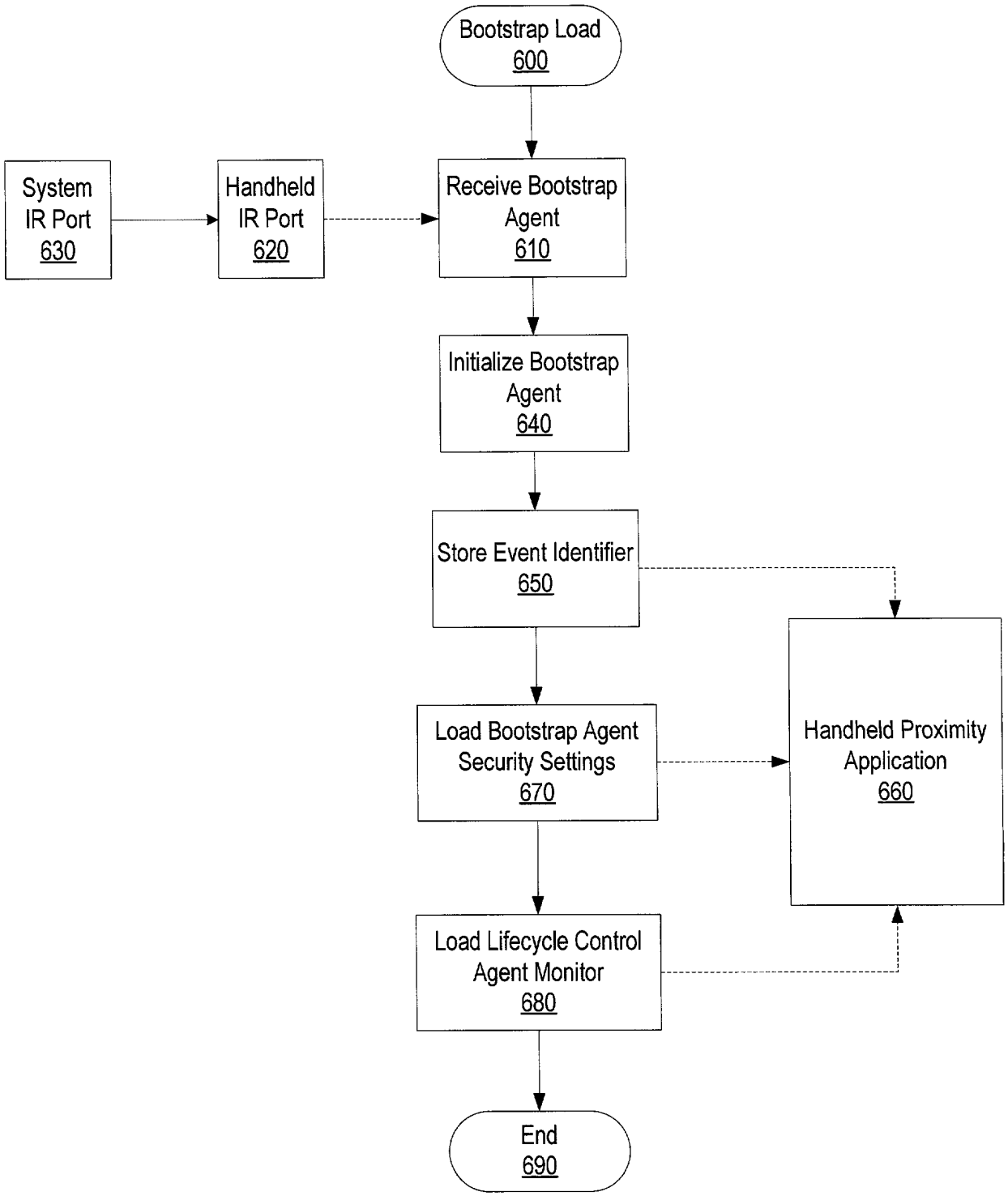

Bootstrap Load
600
System IR Port
630
Handheld IR Port
620
Receive Bootstrap Agent
610
Initialize Bootstrap Agent
640
Store Event Identifier
650
Load Bootstrap Agent Security Settings
670
Handheld Proximity Application
660
Load Lifecycle Control Agent Monitor
680
End
690

Figure 6

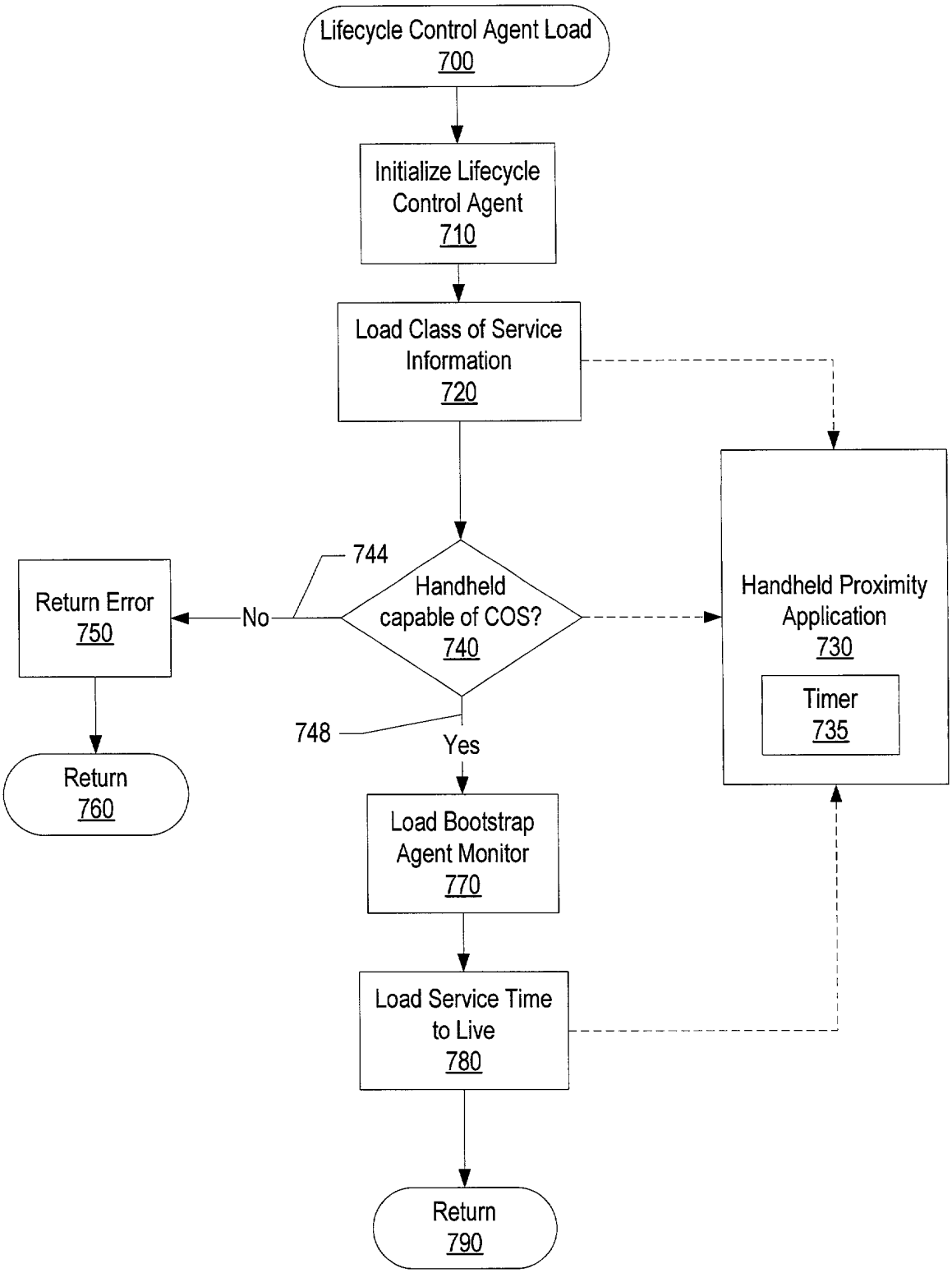

Lifecycle Control Agent Load
700
Initialize Lifecycle Control Agent
710
Load Class of Service Information
720
Handheld capable of COS?
740
744
No
Return Error
750
Return
760
748
Yes
Load Bootstrap Agent Monitor
770
Load Service Time to Live
780
Return
790
Handheld Proximity Application
730
Timer
735

Figure 7

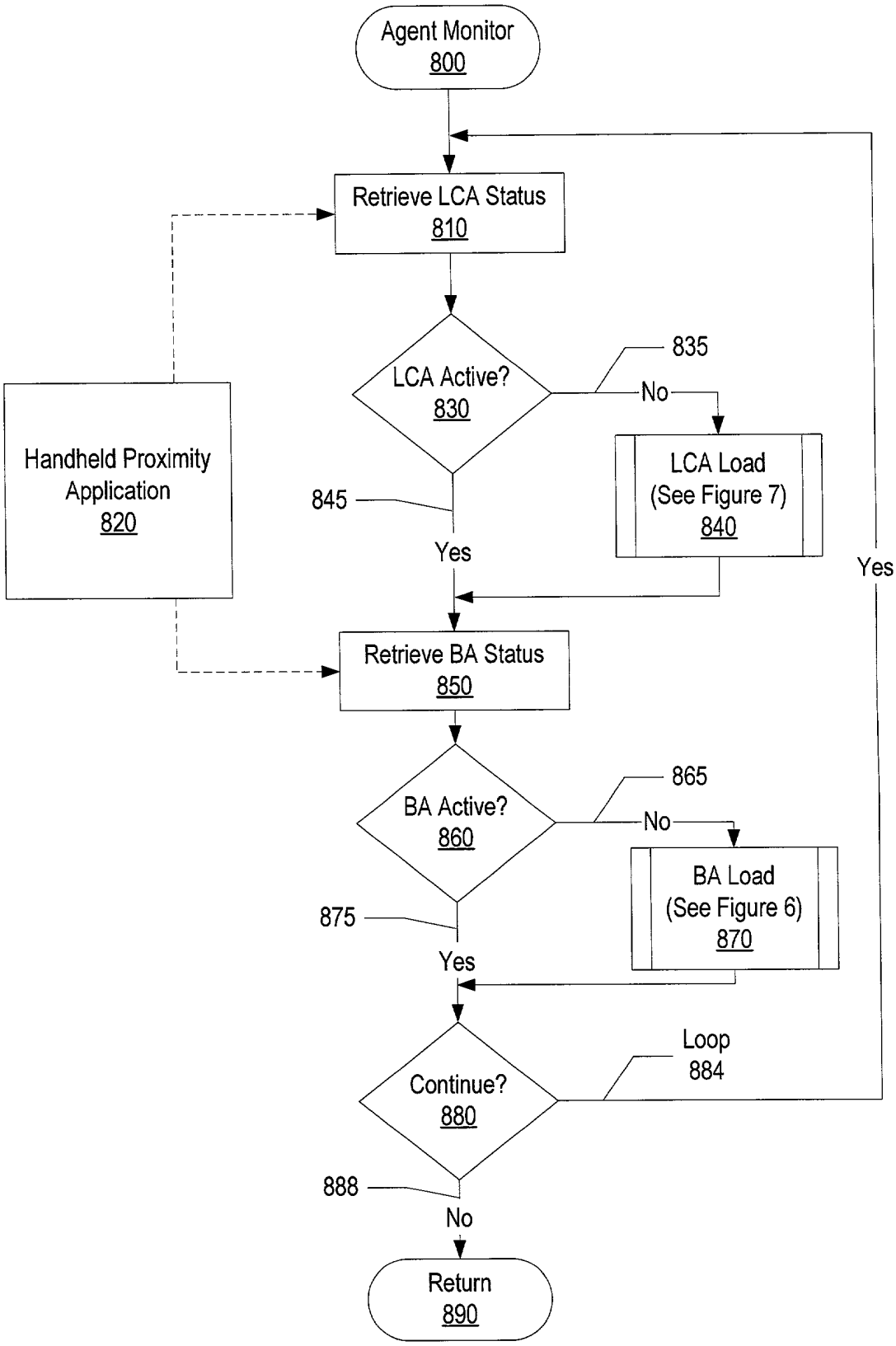

Agent Monitor
800
Retrieve LCA Status
810
LCA Active?
830
835
No
LCA Load
(See Figure 7)
840
845
Yes
Handheld Proximity
Application
820
Retrieve BA Status
850
BA Active?
860
865
No
BA Load
(See Figure 6)
870
875
Yes
Continue?
880
Loop
884
Yes
888
No
Return
890

Figure 8

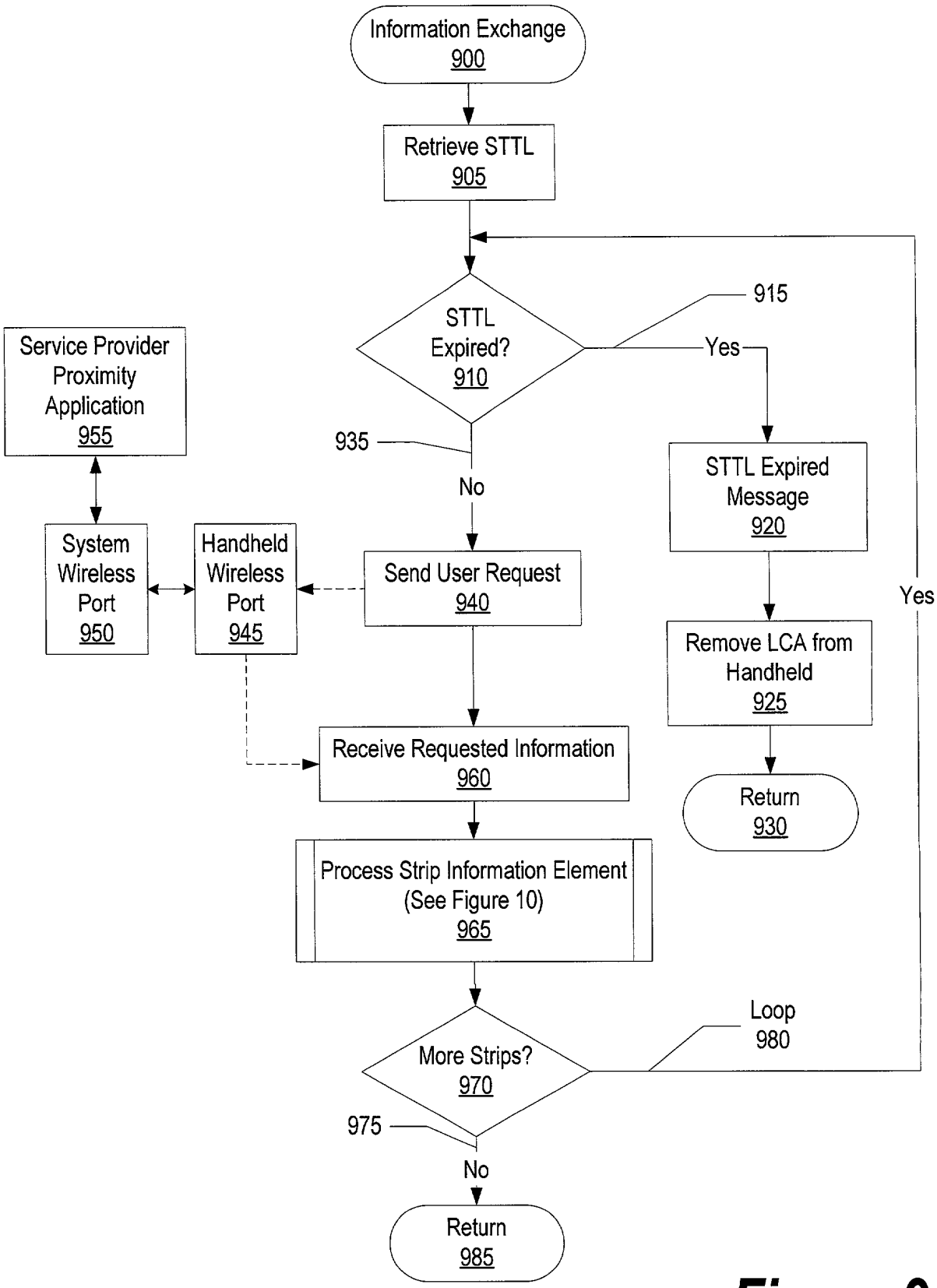

Information Exchange
900
Retrieve STTL
905
STTL
Expired?
910
915
Yes
No
935
Service Provider
Proximity
Application
955
System
Wireless
Port
950
Handheld
Wireless
Port
945
Send User Request
940
STTL Expired
Message
920
Remove LCA from
Handheld
925
Return
930
Yes
Receive Requested Information
960
Process Strip Information Element
(See Figure 10)
965
More Strips?
970
Loop
980
975
No
Return
985

Figure 9

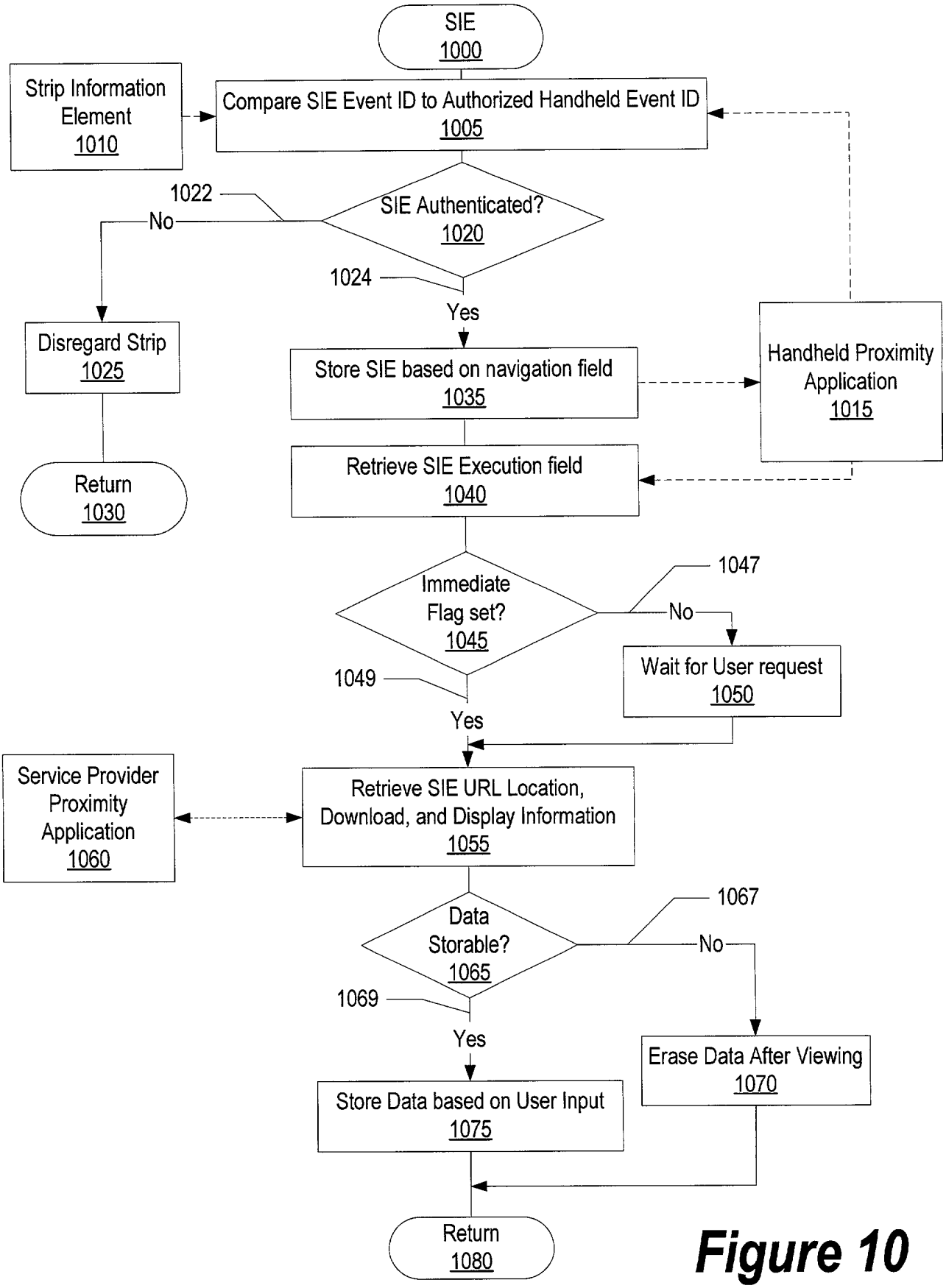
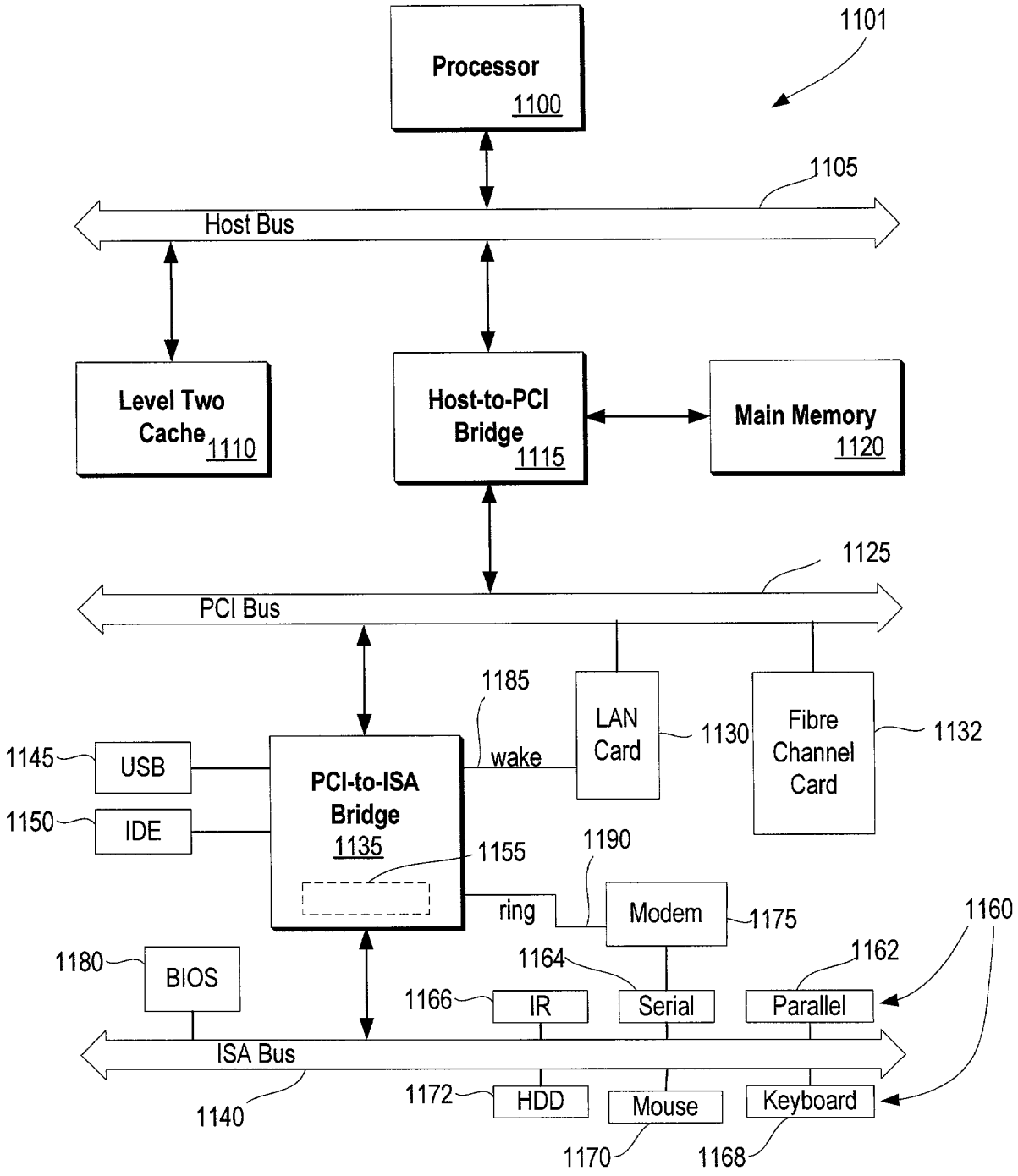

SIE
1000
Strip Information Element
1010
Compare SIE Event ID to Authorized Handheld Event ID
1005
1022
No
SIE Authenticated?
1020
1024
Yes
Disregard Strip
1025
Return
1030
Store SIE based on navigation field
1035
Handheld Proximity Application
1015
Retrieve SIE Execution field
1040
Immediate Flag set?
1045
1047
No
Wait for User request
1050
1049
Yes
Service Provider Proximity Application
1060
Retrieve SIE URL Location, Download, and Display Information
1055
Data Storable?
1065
1067
No
1069
Yes
Erase Data After Viewing
1070
Store Data based on User Input
1075
Return
1080

Figure 10


1101
Processor
1100
1105
Host Bus
Level Two
Cache
1110
Host-to-PCI
Bridge
1115
Main Memory
1120
1125
PCI Bus
1185
wake
LAN
Card
1130
Fibre
Channel
Card
1132
1145
USB
1150
IDE
PCI-to-ISA
Bridge
1135
1155
1190
ring
Modem
1175
1160
1180
BIOS
1164
1162
1166
IR
Serial
Parallel
ISA Bus
1140
1172
HDD
Mouse
Keyboard
1170
1168

# *Figure 11*